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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,573	08/24/2001	Reinhold Kroeger	Q65540	8857

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EXAMINER	
CHANG, RICHARD	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/935,573	KROEGER ET AL.	
	Examiner	Art Unit	
	Richard Chang	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-6 and 8-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-6 and 8-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08/24/2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's arguments and amendments with respect to claims 3-6 and 8-15, filed on 08/03/2006, have been fully considered but are moot in view of the new ground(s) of rejection.

Claims 1-2 and 7 had been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 3-6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6,041,358 ("Huang et al.") in view of the published paper "Hard real-time connectivity: It's in the CAN" COMPUTER DESIGN, XP002147233, January 1997 "("Boyes").

Regarding Claims 3, 8 and 15, Huang et al. teach a method and system for a plurality of nodes operable to communicate with each other by maintaining virtual local area networks (VLAN, transmitting Ethernet type frames), comprising of

determining a transmission protocol from a header of the Ethernet like frames (an identifier operable to determine a transmission protocol from a header portion of said Ethernet frames) (See Col. 2, line 65 to Col. 3, line 14), and

assigning a pair of object identifiers (pair of Virtual Channel identifier) to a pair of nodes for facilitating communication between the nodes using the Ethernet frames (by a server LES) (See Col. 2, lines 3-31), and

managing a finite number of the object identifiers (said server further operable to manage a finite number of object identifiers VCI in membership tracking databases) (See Col. 5, line 61 to Col. 6, line 13), wherein the transmission protocol is a Virtual LAN protocol and (not a standard Ethernet protocol) (See Col. 5, lines 40-44).

Huang et al. teaches substantially all the claimed invention but did not disclose expressly the particular application involving limitations of

"the transmission protocol conforms to the CAN (ISO 11898) protocol".

Boyes teaches a real-time CAN connectivity that CAN frame with pre-determined identifier-content correspondence is CAN-network-dependent (compliant with the CAN ISO-11898 protocol) between send and receiving node pair (See Fig. 8, page 8, paragraph 1-4).

A person of ordinary skill in the art would have been motivated to employ Marback et al. in Huang et al. in order to obtain a method for transmitting Ethernet frames and to take advantage of the CAN (ISO 11898) protocol well known in the art in claims 3, 8 and 15.

The suggestion/motivation to do so would have been to take advantage of the CAN (ISO 11898) protocol well known in the art, as suggested by Boyes in page 8, paragraph 1-4. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Marback et al. with the Huang et al. to obtain the inventions specified in claims 3, 8 and 15.

Regarding claim 4-5, 10 and 14, as discussed above, these claims have limitations that is similar to those of claims 3 and 8 and Huang et al. further teaches that providing a subscriber node (source node) that sends a registration request and assigning a private unique object identifier (VCC identifier) to the subscriber node (destination node) (See Col. 2, lines 5-25; also see Col. 9, lines 46-63), thus it is rejected with the same rationale applied against claims 3 and 8 above.

Regarding claim 6, as discussed above, these claims have limitations that is similar to those of claims 3 and Huang et al. further teach that this is a virtual local area networks, inherently the node transmitting control messages (control information in header) to one or more subscriber nodes, for which each of a plurality of stations is continuously receive-ready (See Col. 5, lines 40-59), thus it is rejected with the same rationale applied against claim 3 above.

Regarding claim 9, as discussed above, this claim has limitations that is similar to those of claims 8 and Huang et al. further teaches that a subscriber node sends a registration request to the central entity (Server) and the central entity (Server) allocates

a private unique CAN object identifier (VCI) to the subscriber node (See Col. 4, lines 10-36), thus it is rejected with the same rationale applied against claim 8 above.

Regarding claims 11 and 13, as discussed above, these claims have limitations that is similar to those of claims 8-9 and Huang et al. further teaches that the central entity (Server LES) uses a code for which each of a plurality of stations is continuously receive-ready, transmitting control messages to at least one subscriber node (See Col. 1, line 59 to Col. 2, line 31), thus it is rejected with the same rationale applied against claims 8-9 above.

Regarding claim 12, as discussed above, this claim has limitations that is similar to those of claims 8 and Huang et al. further teaches that a subscriber node sends a registration request to the central entity (Server LES) and the central entity (Server LES) allocates a private unique CAN object identifier (VCI) to the subscriber node (See Col. 5, lines 41-60), thus it is rejected with the same rationale applied against claim 8 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rkc

Richard Chang
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Art Unit 2616

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER